AMENDMENTS TO THE CLAIMS

Please cancel Claims 1-7 and 13-15 without prejudice. Please amend Claims 8, 9 and 16, and add new Claims 24-30 as follows:

1-7. (Canceled)

8. (Currently amended) An isolated polypeptide ~~of~~ comprising arabinose isomerase isolated from ~~*Thermatoga*~~*Thermotoga neapolitana*.

9. (Currently amended) An isolated polypeptide ~~of~~ comprising arabinose isomerase encoded by ~~the polynucleotide of Claim 1~~ a nucleotide derived from *Thermotoga neapolitana*.

10. (Original) The isolated polypeptide of Claim 9, wherein said arabinose isomerase has the amino acid sequence of SEQ. ID NO: 4.

11. (Original) The isolated polypeptide of Claim 10, further comprising a solid support.

12. (Original) The isolated polypeptide of Claim 11, wherein the solid support is a silica bead.

13-15. (Canceled)

16. (Currently amended) An arabinose isomerase produced by ~~the~~ a method ~~of Claim 13.~~ comprising:

providing a host cell transformed with an expression vector comprising a nucleotide derived from *Thermotoga* neapolitana, the polynucleotide coding for an arabinose isomerage; and

culturing the host cell in a medium, thereby producing the arabinose isomerase.

17. (Original) A method of producing tagatose, comprising:

providing the isolated polypeptide of Claim 9; and

admixing the arabinose isomerase with galactose, thereby causing a reaction and producing tagatose.

18. (Original) The method of Claim 17, wherein the reaction is carried out at a pH from about 5 to about 8.

19. (Original) The method of Claim 17, wherein the reaction is carried out at a temperature from about 50°C to about 100°C.

20. (Original) The method of Claim 19, wherein the reaction is carried out at a temperature from about 70°C to about 95°C.

21. (Original) The method of Claim 17, wherein the isolated polypeptide is attached to a solid support.

22. (Original) The method of Claim 21, wherein the solid support is a silica bead.

23. (Original) The method of Claim 17, wherein the reaction is carried out at a temperature of about 80°C.

24. (New) The method of Claim 17, wherein the nucleotide has the sequence of SEQ. ID NO: 3.

25. (New) The method of Claim 17, wherein the arabinose isomerase has the amino acid sequence of SEQ. ID NO: 4.

26. (New) The isolated polypeptide of Claim 9, wherein the nucleotide has the sequence of SEQ. ID NO: 3.

27. (New) The arabinose isomerase of Claim 16, wherein the arabinose isomerase has the amino acid sequence of SEQ. ID NO: 4.

28. (New) The arabinose isomerase of Claim 16, wherein the nucleotide has the sequence of SEQ. ID NO: 3.

29. (New) The arabinose isomerase of Claim 16, wherein the host cell is *E. coli*.

30. (New) The arabinose isomerase of Claim 16, wherein the host cell is E. coli BL21/DE3 (pTNAI) deposited as Accession No. KCCM-10231.

ELECTION OF INVENTION

In the Restriction Requirement, the Examiner indicated that this application includes more than one invention identified as follows:

Group I:	Claims 1-7 and 13-15 drawn to DNA, vectors, host cells and expression of arabinose isomerase;
Group II:	Claim 8-12 and 16 drawn to arabinose isomerase; and
Group III:	Claims 17-23 drawn to a method of producing tagatose.

New Claims 26-30 are drawn to arabinose isomerase and believed to belong to Group II. Applicants **elect Group II (Claims 8-12, 16 and 26-30)**. This election is made without traverse.